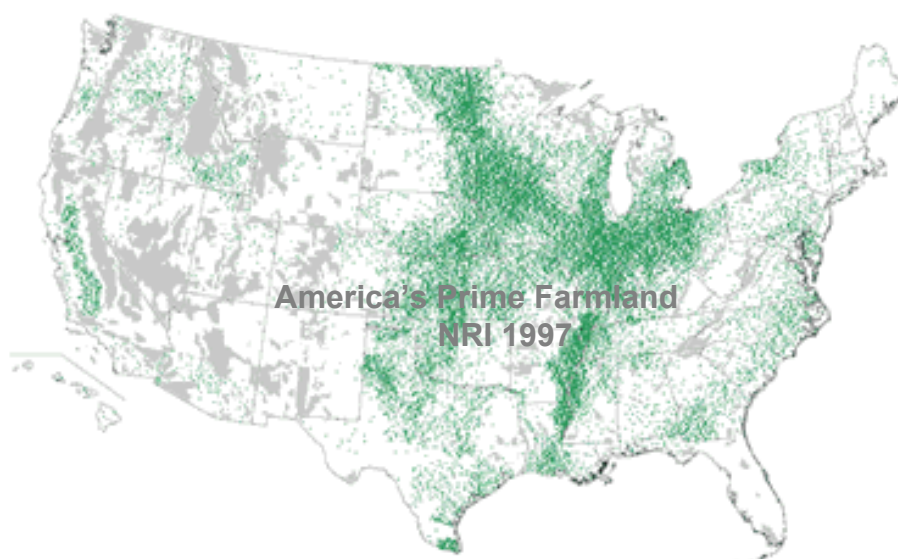


United States Department of Agriculture



Farmland Protection Program Draft Environmental Assessment



October 2002

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INTRODUCTION

This Draft Environmental Assessment (EA) documents the analysis of the environmental and socioeconomic effects of a proposed action and alternatives to that action. The purpose of an EA is to briefly provide sufficient evidence and analysis for determining whether the effects of the proposed action are likely to significantly affect the quality of the human environment. If any significant effects are discovered, a detailed analysis in the form of an Environmental Impact Statement will be prepared. Upon completion of the EA, NRCS will publish, in the Federal Register, either a Notice of Intent to Prepare an Environmental Impact Statement (NOI) or a Notice of Availability of a Finding of No Significant Impact (FONSI) and EA.

The analysis contained in this EA complies with the requirements of the National Environmental Policy Act of 1969 (NEPA) and the Council of Environmental Quality (CEQ) regulations implementing NEPA (40 CFR Parts 1500-1508).

PROPOSED ACTION

The Natural Resources Conservation Service (NRCS) is proposing to publish a proposed rule for carrying out the Farmland Protection Program (FPP) authorized by Section 388 of the Federal Agriculture Improvement and Reform Act of 1996 (Public Law (P.L.) 104-127), as amended by the Farm Security and Rural Investment Act of 2002 (P.L. 107-424). A copy of the FPP legislation, as amended, is located in Appendix A.

Currently, as Congress makes funds available for FPP, NRCS publishes in the Federal Register (FR) requests for proposals for federally recognized Indian tribes and governmental and non-governmental organizations to cooperate in the acquisition of conservation easements or other interests in prime, unique, or other productive land for the purpose of limiting conversion to nonagricultural uses. (See, for example, 66 FR 6566-6570 (January 22, 2001)).

The FPP is a voluntary program that helps farmers and ranchers keep their land in agriculture and prevent conversion of agricultural land to nonagricultural uses. The program provides matching funds to State, Tribal, and local governments and non-governmental organizations with existing farmland protection programs to purchase conservation easements. These entities purchase easements from landowners in exchange for a lump sum payment, not to exceed the appraised fair market value of the land's development rights. The easements are perpetual.

There are approximately 328 million acres of prime farmland within the United States. Since FPP's inception in 1996, 29 States have received nearly \$51 million in financial assistance and \$2.2 million in technical assistance. For every federal dollar spent, an additional \$3.69 is spent by the participating State and local government entities. This has resulted in 108,000 acres being enrolled into the program since 1996. Figure 1 identifies the distribution of FPP funds across States.

FARMLAND PROTECTION AND COMMUNITY PLANNING

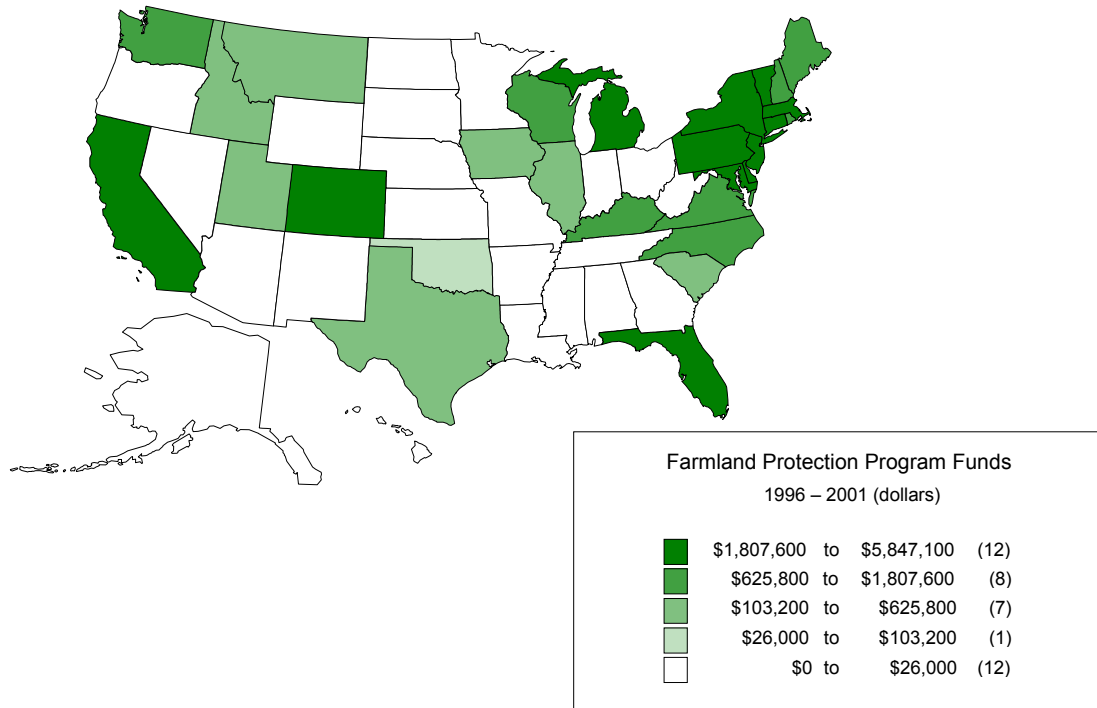


Figure 1. Distribution of FPP Funds

THE PURPOSE AND NEED FOR ACTION

The purpose of the proposed action is to enable NRCS to provide Federal assistance to reduce the conversion of productive farm and ranchland to nonagricultural uses. Eligible lands include land on a farm or ranch that has prime, unique or other productive soils; or land that contains historical or archeological resources. These lands must also be currently used as cropland, rangeland, grassland, pastureland, and forestland that is an incidental part of an agricultural operation.

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, without intolerable soil erosion, as determined by the Secretary. Prime farmland also includes land that possesses the above characteristics but is being used currently to produce livestock or timber. It does not include land already in or committed to urban development or water storage.

Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops, as determined by the Secretary. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include citrus, tree nuts, olives, and cranberries, fruits, and vegetables.

Other productive soils include farmland that is other than prime or unique farmland that is of statewide or local importance for the production of food, feed, fiber, forage, or oilseed crops. The appropriate State or unit of local government makes this determination, along with the concurrence of the Secretary of Agriculture.

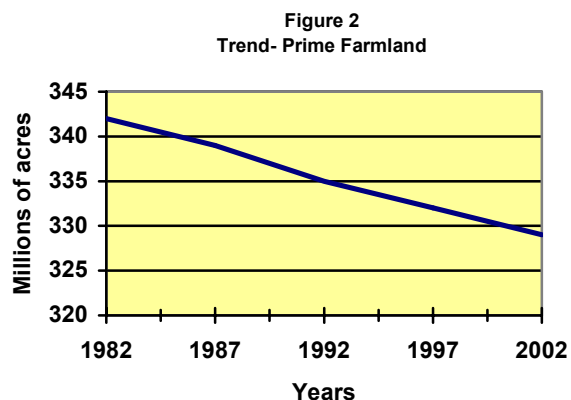
Lands containing historical or archeological resources are those that are listed in or formally determined eligible for listing in the National Register of Historic Places, or in State Registers or Tribal Registers of Historic Places.

The need to which NRCS is responding in the proposed action is the need to purchase conservation easements or other interests as directed by Congress in order to:

1. Help protect of the Nation's farmland resource and provide the food and fiber necessary for the continued welfare of the people of the United States;
2. Slow the irrevocable conversion of the Nation's farmland from actual or potential agricultural use to nonagricultural use;
3. Maintain the ability of the United States to produce food and fiber in sufficient quantities to meet domestic needs and the demands of our export markets;
4. Curb the loss of open space;
5. Sustain rural economic stability and development;
6. Maintain, restore, and enhance ecosystems;
7. Protect historic landscapes and scenic beauty.

A significant and critical part of the U.S. agricultural system faces an uncertain future resulting from land use controversy in the urban fringe (rural agricultural land experiencing pressure from suburban development). Urbanization is rapidly moving beyond the suburbs. As a result, competition has developed for incompatible uses of agricultural land. Land allocated to farming provides a flow of both market and nonmarket benefits to society (e.g., crop production and open space). These same lands, on the other hand, are sought by developers for profitable building sites.

Estimates of the agricultural land converted annually to non-agricultural uses vary between 800,000 acres to more than 3 million nationwide. More important than the exact rate of conversion is the location of rapidly changing land use. Much of the land being lost is prime or unique farmland, disproportionately located near cities.



According to NRCS National Resource Inventory (NRI) data, over the past 10 years, an average of 1.3 million acres of prime farmland has been lost each year. American Farmland Trust (AFT) figures estimate that 58 percent of the total U.S. agricultural production comes from counties that the Census Bureau classifies as metropolitan and their adjoining counties. Where the Nation's strategic farmland is receiving pressure from urban development is where FPP has the opportunity to provide the greatest impacts. The AFT has identified these areas as shown in Figure 3.

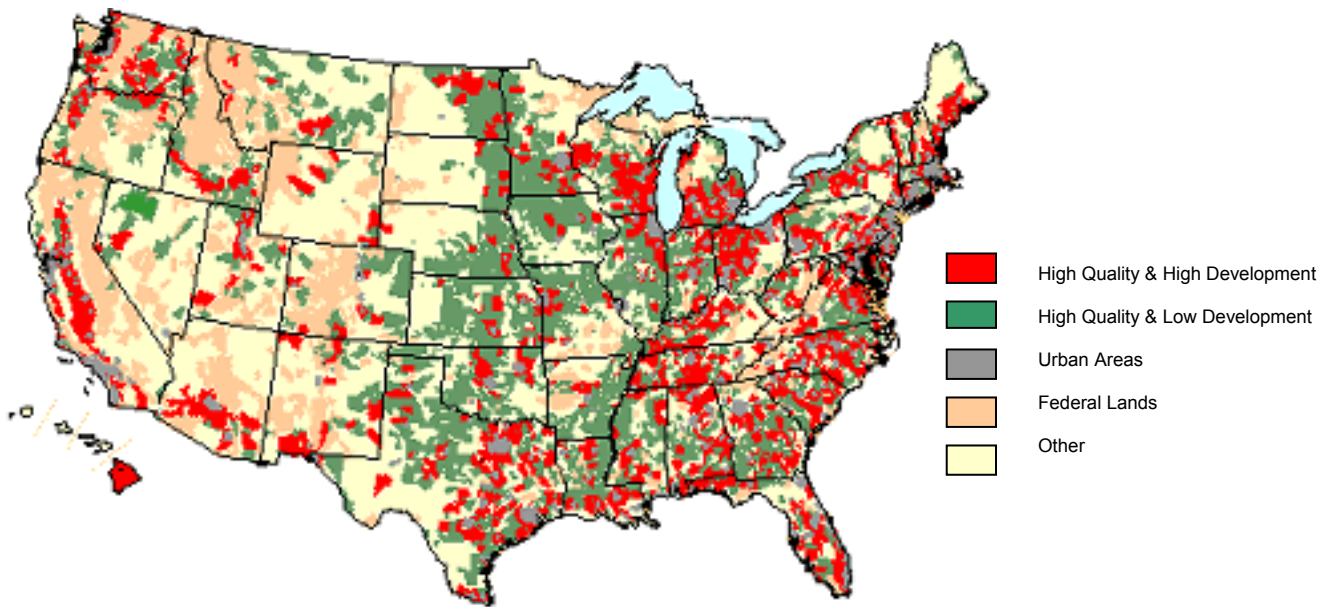


Figure 3.
The geographic relationship between high quality farmland and development pressure.

ALTERNATIVES

Alternative 1, Proposed Action – Implement the FPP. This alternative would provide matching funds (50% of the appraised fair market value) to State, Tribal, or local governments and nongovernmental organizations with existing farmland protection programs to purchase conservation easements. The purpose of these easements is to limit conversion of farm and ranchland to nonagricultural uses by essentially purchasing the value of development rights. Landowners retain all rights to use of the property for agriculture.

All lands enrolled must have a conservation plan developed based on NRCS Field Office Technical Guide specifications. The following table provides a listing of the conservation practices used in the current easements. Each conservation plan will

utilize different combinations of practices depending on the needs of the treatment unit. NRCS anticipates that future easements will utilize the same conservation practices.

Table 1. Conservation Practices

PRACTICE NAME	CODE¹
<i>Conservation Crop Rotation</i>	328
<i>Contour Buffer Strips</i>	332
<i>Cover Crop</i>	340
<i>Filter Strip</i>	393
<i>Fence</i>	382
<i>Forest Stand Improvement</i>	666
<i>Grassed Waterway</i>	412
<i>Irrigation Water Management</i>	449
<i>Nutrient Management</i>	590
<i>Pest Management</i>	595
<i>Pipeline</i>	516
<i>Range Planting</i>	550
<i>Residue Management, Mulch Till</i>	329B
<i>Residue Management, No Till/Strip Till</i>	329A
<i>Residue Management, Ridge Till</i>	329C
<i>Residue Management, Seasonal</i>	344
<i>Riparian Forest Buffers</i>	391
<i>Roof Runoff Structure (Barnyard)</i>	570
<i>Upland Wildlife Habitat Management</i>	645
<i>Wetland Wildlife Habitat Management</i>	644
<i>Windbreak/Shelterbelt Establishment</i>	380
<i>Waste Storage Facility</i>	359

Alternative 2, “No Action”

Under the “No Action” alternative, the NRCS would not implement the FPP. States, Tribes, and other organizations would likely continue to purchase easements and utilize other instruments to protect productive agricultural land without a federal contribution. Often, they would not require a conservation plan that meets NRCS standards. This alternative forms the baseline for comparing the effects of the proposed action.

IMPACTS

Alternative 1, “Proposed Action” – Implement the FPP

The FPP authorizes NRCS to purchase easements and other interests in eligible land. Federal funds for purchase of perpetual easements on prime and unique farmland or land that contains historical or archeological resources are authorized in the total amount of \$597 million over the next six years (2002-2007). Because matching funds must be raised to receive Federal assistance, the average federal cost per acre of land

¹ Practice numbers are assigned by NRCS for eases of reference and are found in the NRCS National Handbook of Conservation Practices.

protected by the FPP has been a little less than \$500 per acre. Thus, NRCS estimates that about 1.3 million acres can be protected through fiscal year 2007.

Publication of the rule does not directly result in an impact to the quality of the human environment, but enrollment of land in the FPP does result in a restriction on future development, as well as application of a conservation plan to the land under easement. It may also result in protection of some historic resources that might otherwise be destroyed. Thus, national implementation of the FPP causes indirect effects to the environment.

NRCS developed network diagrams depicting the chain of natural resource effects resulting from the application of the conservation practices listed in Table 1, should the property be taken under easement. These diagrams, as well as a photo and a summary description about how each of these practices is intended to be used and the general effects of using the practice is found in Appendix B.

Each of the diagrams first identifies the typical setting to which the practice is applied. This includes identification of the predominating land use and the resource concerns that trigger use of the practice. The diagrams then identify the practice used to address the resource concerns. Immediately following the practice, there is a description of the immediate physical actions that occur to implement the practice. From there, the diagrams depict the occurrence of the direct, indirect and cumulative effects of the practice. Effects are qualified with a "+" or a "-" which denotes an increase ("+") or decrease ("-") in the effect. Pluses and minuses do not equate to beneficial and adverse or positive and negative impacts. Only the general effects that are considered to be the most important ones from a national perspective are illustrated.

The effects of the practices may vary somewhat depending on the local ecosystem(s), methods of practice installation, and presence of special resources of concern in a particular state, such as the presence of a coastal zone, endangered or threatened species, historic and cultural resources, and the like. While effects on these resources may be described in general terms at the national level, they must be addressed at the state and local level. This is particularly true for endangered and threatened species, historic preservation, historic and cultural resources, essential fish habitat and other resources that are protected by special authorities that require consultation. NRCS will consult on a state or site-specific level as needed and appropriate, to ensure FPP Program actions do not adversely affect endangered or threatened species, essential fish habitat, cultural resources, or any other protected resources and will implement practices in a manner that is consistent with NRCS policy to avoid, mitigate or minimize adverse effects to the extent feasible.

For example, to ensure compliance with the Endangered Species Act, State Conservationists will invite representatives of the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS), as applicable, to all State Technical Committee meetings and involve them in the development of program criteria within the State. NRCS will also conduct additional programmatic consultations with FWS and

NMFS at the State level as needed to ensure FPP program implementation is not likely to adversely affect species listed as endangered or threatened or species proposed for listing as endangered or threatened or designated critical habitat. Such consultation will also be used to identify ways the FPP program might further the conservation of protected species and identify situations in which no site-specific consultation would be needed.² Site-specific consultation will also be conducted as needed to avoid adversely affecting any protected species or habitat.

To ensure compliance with the National Historic Preservation Act and associated authorities, NRCS State Offices will follow the procedures outlined in the Advisory Council on Historic Preservation's (ACHP) regulations (36 CFR Part 800) or, in accordance with NRCS' alternate procedures (nationwide Programmatic Agreement), invite State Historic Preservation Officers (SHPO's) and federally recognized Tribes (or their designated Tribal Historic Preservation Officers) to enter into consultation agreements that highlight and focus review and consultation on those resources and locations that are of special concern to these parties. In addition, if no state-level agreements are developed with the SHPO's or Tribes, and/or if other consulting parties are identified, they will be afforded, as appropriate, an opportunity to advise the NRCS State Office during project-specific planning about their historic and cultural resource concerns so that they may be taken into account in accordance with the ACHP regulations.

"Environmental benefits of managing our land resources to avoid unplanned and haphazard development include protection of habitat, prime agricultural soils, and watershed health, as well as reduced fire frequency, recreation pressure, nutrient loading of streams, and atmospheric pollution. Agricultural lands help retain permeable surfaces that in turn reduce sediment, bacteria, nutrients, and metal pollution of streams and waterways. Vegetation helps regulate base flow, peak discharge, and the integrity of stream and riparian systems that directly affect water quality and indirectly reduce costs for manmade systems to artificially manage the watershed. By absorbing water, these lands reduce runoff, which is a major source of pollution of streams, rivers, and marine environments and a major contributor to flooding and a factor in soil erosion and the decreased recharge of aquifers. Parking lots, for example, generate 16 times more runoff than open lands...."³

Agricultural "...lands also protect biodiversity by providing habitat for a variety of wildlife, including rare and endangered species. Large, unfragmented tracts of agricultural lands and forest corridors allow for interaction and crossbreeding between population groups of the same species, which increases population health and genetic viability. Compared to cropland, the loss of forest land may result in greater direct loss of wildlife

² In addition to situations in which NRCS determined there would be no effect on protected species or habitat, site-specific consultation should not be needed when NRCS and FWS or NMFS agree a category of proposed actions is not likely to adversely affect a protected species or habitat and NRCS obtains an incidental take statement based on that agreement.

³ USDA Advisory committee on Farm and Forest Protection and Land Use, *Maintaining Farm and Forest Lands on Rapidly Growing Areas*, January 2001, p. 10.

habitat. Reduced land fragmentation helps maintain continuity of ecosystems-contributing to species diversity and vigor by maintaining habitat for intermixing and for escape from catastrophic events such as wildfire. Habitat fragmentation and loss are among the leading causes of species extinction....”⁴

“Maintaining agricultural land “...and open space improves air quality. Vegetation reduces atmospheric temperatures directly through evapotranspiration and indirectly by mitigating heat production and storage and improving airflow and surface reflectivity. Lowered temperatures in turn reduce air pollution. Trees are a dominant surface upon which many air pollutants are removed; tree cover in urban areas typically removes between 60 and 230 kilograms of pollutants per hectare per year....

“Finally, farm and forest lands provide spaces for wetlands and wildlife habitat: forest corridors provide flyways for bird migration, and wetlands are valuable areas for receiving and filtering floodwaters and recharging ground water supplies. In southern California, where urban sprawl has been rampant, 60 species have been listed as threatened or endangered, and another 450-plus species are considered sensitive. Increased fire frequency and increased recreation pressure on the remaining parks and wildlands exacerbate many of these changes, which are associated with urban development. In addition, urbanites often bring non-native species with them to occupy these altered environments; these species compete with the native species....”⁵

Alternative 2, “No Action”

Approximately 58 percent of America’s counties are seriously concerned over loss of farmland due to expected growth in the coming years.⁶ The development that occurs with growth often results in conversion of highly productive land because the characteristics of quality farmland, such as flat or well-drained soils, are often the same characteristics of land sought for development. The agricultural, open space, and related amenity benefits are then lost indefinitely, and often permanently. Though a decision to restore the agricultural viability of a residential subdivision may be technically possible, it does not occur, largely because of the expense involved. Thus, if no action is taken to implement the FPP, it is likely that the 1.3 million acres of farmland that the program would otherwise protect would be converted instead to development or another nonfarm use. It is also likely that historic resources present on eligible lands would be destroyed, resulting in a loss of irreplaceable ties to and knowledge about our national, state and local heritage.

There are long-term consequences for converting a tract of agricultural land to a nonfarm use. First, development immediately exhausts the agricultural productivity of the reallocated tract. The current trends in the losses of prime farmland are representative of the losses of all highly productive farmland. If current trends continue

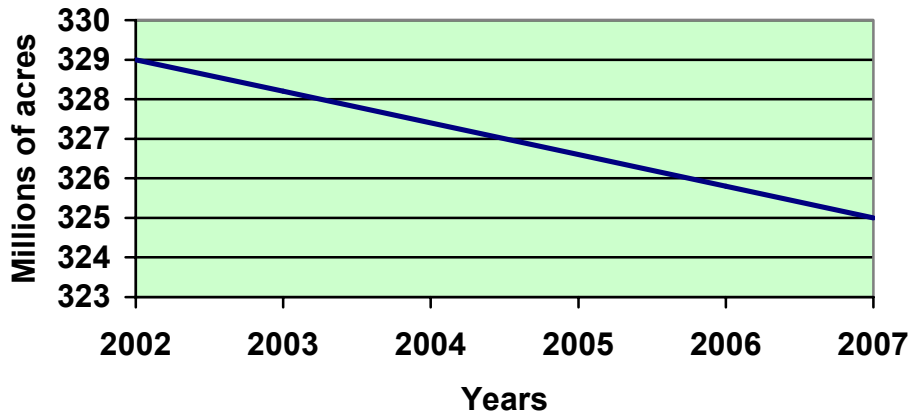
⁴ Ibid.

⁵ Ibid.

⁶ Ibid., p. 4.

at the present rate, approximately 4 million acres of prime farmland will be lost to nonagricultural uses between 2002 and 2007. (See Figure 4.)

Figure 4.
Prime Farmland
Projected Trend



Development indirectly reduces the productive potential of surrounding agricultural land by limiting its current or future use. In fact, impacts on the converted tract itself may be small in comparison to the current and future consequences impacting adjacent farmland. As an example, restrictions may be imposed on farming activities that affect the health, safety, and welfare of the growing non-farming population. The applications of pesticides or manure near residential areas are two such activities for which society may demand new regulation. Much like current laws restricting the location of confined feeding operations, new regulations could require minimum separation distances between these activities and residential areas.

The locations of prime farmland that have been converted to developed land, according to the most recent NRI data, are shown in Figure 5.

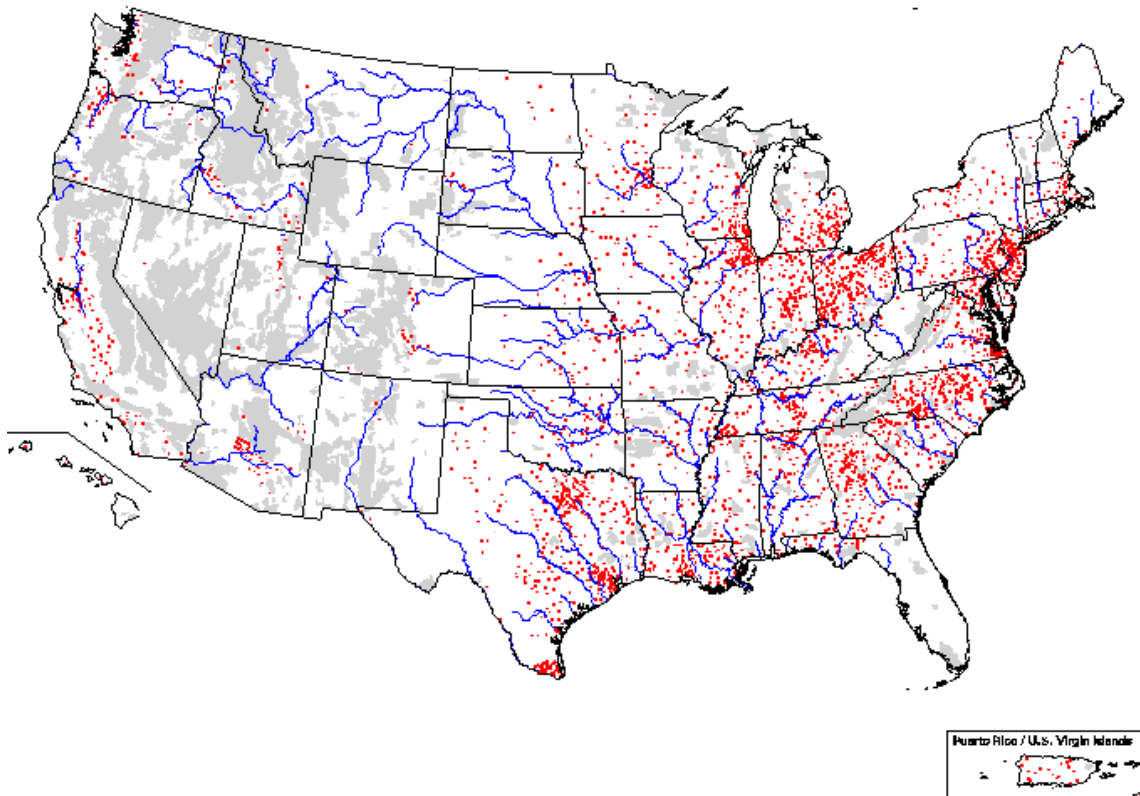


Figure 5.
Acres of Prime Farmland Converted to Developed Land, 1982 – 1997
 (Each red dot represents 2,000 acres of newly developed land)

A total of 7,347,000 acres of prime farmland were developed between 1982 and 1997. The location of these acres correlates closely to those areas identified in Figure 3 as having high vulnerability for conversion because they are located near urban centers.

Scattered residential development also increases the potential for nuisance conflicts. Odor, noise, and dust are potential problems associated with agricultural production. These problems can often be avoided only by locating farming operations away from people. Furthermore, even if an area's proportion of agricultural land area remains high, it can be fragmented into smaller scattered parcels, and consequently farmers may be prevented from employing newer technologies that require more land to achieve full economies of scale. Such restrictions reduce efficiency and increase production costs, perhaps even leading to premature idling of land.

Conversion of agricultural uses involves more than the urban and suburban impacts of "...traffic congestion, infrastructure costs, and altered public finances. It alters the landscape, the natural environment, and other factors important to quality of life. For example, low-density development consumes open space in the surrounding countryside, so residents who once had pleasant views of nature now have views of

other suburban houses and shopping centers. In some cases, growth can destroy the very scenic amenities that once attracted people.”⁷

“Community Spaces — The loss of open space can stymie local recreation and cultural activities. For example, a publicly used lake or beach may become fenced off private property. A place known for hunting or fishing may be closed to public access. Many communities use undeveloped lands for public activities, such as county fairs and other local festivals. Other such open spaces may be the sites of historic events, such as civil war battlegrounds. The pressure of development can consume these sites and, in the process, obliterate local historical landmarks.”⁸

“Environmental Changes — Growth poses numerous environmental challenges. Because the environment is linked to other aspects of society, such as public health and the economy, environmental implications from growth can have various adverse impacts on local communities....”⁹

“Wildlife Habitat — Development disturbs, pollutes, and destroys the natural habitats for various native species when it consumes wetlands, forests, alpine, and desert terrain. Insecticides and fertilizers used on lawns can have significantly greater negative effects on wildlife than agricultural land due to the increased rate of application. In some cases, Federal or State governments will cause communities to restrict development and related activities to protect wildlife. However, not all wildlife effects are bad. For example, some types of developments provide protected green space or parkland that creates mini-ecosystems where habitat-generalist species and those that can fly between fragments can flourish....

“Growth seriously fragments wildlife habitats. Habitat fragmentation is often singled out as a principal threat to the preservation of biodiversity.... The negative effects of fragmentation on biodiversity are numerous, and can be grouped into four major categories:

- “• Reduction in total habitat area. Habitat remnants support fewer species and smaller populations of the same species than larger swaths;

- “• Loss of wide-ranging, low-density, and habitat-specialist species. Mountain lions, which have ranges that can exceed 1,000 square kilometers...are now extinct in a recently isolated habitat fragment in Orange County, California. Habitat interior dwellers, such as some forest birds, may be locally extinct from fragments of 1 square kilometer as studies in eastern North American deciduous forests have shown ...;

⁷ Heimlich, Ralph E. and Anderson, William D., *Development at the Urban Fringe and Beyond, Impacts on Agriculture and Rural Land*, USDA, ERS, Agricultural Economic Report Number 803, June 2001, p. 31.

⁸ Ibid.

⁹ Ibid.

“• Increased “edge effects” or the microclimatic changes that occur along power line corridors, roads and urban development, which favor exotic species, often at the expense of native and interior species...; and

“• Increased extinction risk from demographic, environmental, and genetic variances....

“Urban development is one of the principal causes of wetland loss. In 1985, 85 percent of Maine’s wetlands were visible from a road or within 2,000 feet of a road, and thus of limited habitat value. Of Maine’s 2,700 lakes, 200 have been harmed by development, and 300 are at risk Between 1982 and 1992, the NRI showed that 89,000 acres of wetlands were lost to urban uses per year, 57 percent of total gross wetland loss

“Development of roads in formerly rural areas creates increased opportunities for collisions between wildlife and new urban residents. The Humane Society and the Urban Wildlife Research Center estimate that more than 1 million large animals are killed annually on U.S. highways. Roadkills usually increase with traffic speeds and volumes. Studies in the state of Florida indicate that road kills are the primary cause of death for most large mammals, including several threatened species. Some animals have an aversion to roads, which may affect their behavior and movement patterns. For example, black bears cannot cross highways with guardrails. Other species become accustomed to roads, and are therefore more vulnerable to harmful interactions with humans. By forming a barrier to species movement, roads and development fragment and isolate wildlife populations, preventing interaction and cross breeding between population groups of the same species. This reduces population health and genetic viability. Development and road construction and use introduce a variety of noise, air, and water pollutants. Loss of habitat, invasion of exotic species, alteration of watershed hydrology through changes in water quality and water quantity, stream channels, and groundwater all accompany development, as does increased access by hunters, poachers, and irresponsible visitors.... “¹⁰

“**Water** — Many of development’s health-related issues involve water. For example, much of the development in the countryside involves homes with on-site septic systems, which often cause greater water pollution problems than municipal sewage systems. While many of the bigger developments are hooked up to municipal or county water and sewer systems, these systems can sometimes overflow, particularly during heavy storms, causing significant pollution problems. Some developers build their own wastewater treatment plants, and these systems sometimes prove to be inadequate. These private developer-built systems sometimes prove to be unacceptable in quality.”¹¹

“The type of land use, and particularly its density and the amount of impervious surface, affects the amount of pollutants in storm water runoff. More intense uses engender

¹⁰ *Ibid.*, pp. 33, 34.

¹¹ *Ibid.*, p. 34

more pollutants, and large impervious surfaces lead to greater volumes of runoff and more pollution.”¹²

“Another problem, particularly in the West, involves limited or declining water supplies. Many new homes in the countryside use on-site wells for water, and in some cases underground water supplies are declining. This problem is exacerbated by less natural replenishing of underground water due to increased water runoff caused by increased area of impervious surfaces, as roofs, roads and parking lots, and the building of sewers.

“Floods and fires can become more important concerns as more people move to the countryside.... Development not only raises the stakes of life and property loss, it may also help cause or aggravate floods and fires. For example, construction often causes erosion which fills up streams and increases the likelihood of floods, and the increased area of impervious surface increases flood peaks. Development adds to heat retention, eliminates wetlands, and results in reduced forestland management, resulting in increased fuel and adding to the threat of fires.”¹³

“Air Quality — Air pollution is sometimes an important environmental issue in areas with high rates of commuting, where ground level ozone (smog) emitted from autos creates significant health concerns. When the level of air pollution exceeds EPA standards, Federal law requires that planning be aimed at reducing air pollution levels, or the State may be penalized by reductions in Federal highway aid.”¹⁴

“Positive Impacts on Farming from Urbanization

“• Proximity to urban centers may provide a larger pool of seasonal or part-time labor that is especially important to harvest high-value crops. One reason metropolitan farms can adopt high-value crops is because local sources of labor are available at peak periods....

“• Greater off-farm employment opportunities for the farmer or his/her family may help support the farming operation.... Off-farm employment can also provide a transition to part-time farming, particularly if enterprise changes are undertaken that reduce full-time labor needs on the farm. Opportunities from urban employment run in both directions. People in urbanizing areas may work part-time on the farm or start recreational farms that eventually develop into full-time, part-time, or retirement businesses.”¹⁵

“Negative Impacts on Farming from Urbanization

“• Suburban neighbors’ complaints about farm odors and chemical spraying may force farmers to turn to enterprises that produce fewer negative side effects. Some of the alternatives will be more profitable and some will be less....

¹² Ibid.

¹³ Ibid., pp. 34, 35.

¹⁴ Ibid., p. 35.

¹⁵ Ibid., p. 39.

“• Conflicts can arise between growers and new suburban neighbors over early morning noise, and increased traffic can hinder farmers’ ability to move their equipment along overcrowded rural roads used as commuter routes.

“• Markets for traditional dairy products or field crops may be reduced, as milk-collection routes are curtailed and grain elevators go out of business. In some areas, farm input suppliers, machinery dealers, and other forms of agricultural support may decline.

“• Real estate taxes may rise as land prices rise to reflect the potential for nonfarm development.

“• Growers may face increased pressure from water- and land-use restrictions.

“• Farms may face deteriorating crop yields from urban smog, theft, and vandalism.”¹⁶

¹⁶ Ibid.

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*Diagram Facilitator

REFERENCES

Heimlich, Ralph E. and Anderson, William D., *Development at the Urban Fringe and Beyond, Impacts on Agriculture and Rural Land*, USDA, ERS, Agricultural Economic Report Number 803, June 2001.

USDA Advisory committee on Farm and Forest Protection and Land Use, *Maintaining Farm and Forest Lands on Rapidly Growing Areas*, January 2001.

APPENDICES

Appendix A –FPP Legislation, as amended by the Farm Security and Rural Investment Act of 2002

Appendix B – FPP Practice Photos, Descriptions and Network Diagrams

**FPP LEGISLATION, AS AMENDED BY THE FARM SECURITY
AND RURAL INVESTMENT ACT OF 2002**

Subchapter B—Farmland Protection Program

SEC. 1238H. DEFINITIONS.

In this subchapter:

(1) **ELIGIBLE ENTITY.**—The term ‘eligible entity’ means—

(A) any agency of any State or local government or an Indian tribe (including a farmland protection board or land resource council established under State law); or

(B) any organization that—

(i) is organized for, and at all times since the formation of the organization has been operated principally for, 1 or more of the conservation purposes specified in clause (i),

(ii), (iii), or (iv) of section 170(h)(4)(A) of the Internal Revenue Code of 1986;

(ii) is an organization described in section 501(c)(3) of that Code that is exempt from taxation under section 501(a) of that Code;

(iii) is described in section 509(a)(2) of that Code; or

(iv) is described in section 509(a)(3), and is controlled by an organization described in section 509(a)(2), of that Code.

(2) **ELIGIBLE LAND.**—

(A) **IN GENERAL.**—The term ‘eligible land’ means land on a farm or ranch that—

(i)(I) has prime, unique, or other productive soil; or

(II) contains historical or archaeological resources; and

(ii) is subject to a pending offer for purchase from an eligible entity.

(B) **INCLUSIONS.**—The term ‘eligible land’ includes, on a farm or ranch—

(i) cropland;

(ii) rangeland;

(iii) grassland;

(iv) pasture land; and

(v) forest land that is an incidental part of an agricultural operation, as determined by the Secretary.

(3) **INDIAN TRIBE.**—The term ‘Indian tribe’ has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(4) **PROGRAM.**—The term ‘program’ means the farmland protection program established under section 1238I(a).

SEC. 1238I. FARMLAND PROTECTION.

(a) **IN GENERAL.**—The Secretary, acting through the Natural Resources Conservation Service, shall establish and carry out a farmland protection program under which the Secretary shall purchase conservation easements or other interests in eligible land that is subject to a pending offer from an eligible entity for the purpose of protecting topsoil by limiting nonagricultural uses of the land.

(b) CONSERVATION PLAN.—Any highly erodible cropland for which a conservation easement or other interest is purchased under this subchapter shall be subject to the requirements of a conservation plan that requires, at the option of the Secretary, the conversion of the cropland to less intensive uses.

(c) COST SHARING.—

(1) FARMLAND PROTECTION.—

(A) SHARE PROVIDED UNDER THIS SUBSECTION.—The share of the cost of purchasing a conservation easement or other interest in eligible land described in subsection (a) provided under section 1241(d) shall not exceed 50 percent of the appraised fair market value of the conservation easement or other interest in eligible land.

(B) SHARE NOT PROVIDED UNDER THIS SUBSECTION.—As part of the share of the cost of purchasing a conservation easement or other interest in eligible land described in subsection (a) that is not provided under section 1241(d), an eligible entity may include a charitable donation by the private landowner from which the eligible land is to be purchased of not more than 25 percent of the fair market value of the conservation easement or other interest in eligible land.

(2) BIDDING DOWN.—If the Secretary determines that 2 or more applications for the purchase of a conservation easement or other interest in eligible land described in subsection (a) are comparable in achieving the purposes of this section, the Secretary shall not assign a higher priority to any 1 of those applications solely on the basis of lesser cost to the farmland protection program established under subsection (a).

APPENDIX B

FPP PRACTICE EFFECTS: PRACTICE PHOTO, DESCRIPTION AND NETWORK DIAGRAMS

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